Арр	lication No.	Applicant(s)
10/0	40,433	YOSHIMURA ET AL.
	miner	Art Unit
Dah	·Wei D. Yuan	1745
The MAILING DATE of this communication appears of It claims being allowable, PROSECUTION ON THE MERITS IS (OR Forewith (or previously mailed), a Notice of Allowance (PTOL-85) or off OTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS the Office or upon petition by the applicant. See 37 CFR 1.313 and I	REMAINS) CLOSED II ler appropriate comm 6. This application is:	n this application. If not included unication will be mailed in due course. THIS
\square The allowed claim(s) is/are <u>1-6</u> .		
$oxed{\boxtimes}$ The drawings filed on <u>09 January 2002</u> are accepted by the Exa	miner.	
 Acknowledgment is made of a claim for foreign priority under 3 a) All b) Some* c) None of the: 1. Certified copies of the priority documents have beer 2. Certified copies of the priority documents have beer 3. Copies of the certified copies of the priority documents have beer International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of this	n received. n received in Applicati nts have been receive	on No ed in this national stage application from the
noted below. Failure to timely comply will result in ABANDONMENT THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. INFORMAL PATENT APPLICATION (PTO-152) which gives rea	Note the attached EX	CAMINER'S AMENDMENT or NOTICE OF or declaration is deficient.
CORRECTED DRAWINGS (as "replacement sheets") must be		
(a) including changes required by the Notice of Draftsperson's	Patent Drawing Revie	ew (PTO-948) attached
1) hereto or 2) to Paper No./Mail Date		the Office action of
(b) ☐ including changes required by the attached Examiner's American Paper No./Mail Date	endment / Comment o	or in the Office action of
Identifying indicia such as the application number (see 37 CFR 1.84(c) each sheet. Replacement sheet(s) should be labeled as such in the he) should be written on ader according to 37 C	the drawings in the front (not the back) of CFR 1.121(d).
. DEPOSIT OF and/or INFORMATION about the deposit of attached Examiner's comment regarding REQUIREMENT FOR	BIOLOGICAL MAT THE DEPOSIT OF B	TERIAL must be submitted. Note the IOLOGICAL MATERIAL.
Attachment(s)		(0.70, 4.50)
. Notice of References Cited (PTO-892)		Informal Patent Application (PTO-152)
☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. ∐ Interview Paper No	Summary (PTO-413), b./Mail Date
		's Amendment/Comment
	7. L Examinor	
. Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date Examiner's Comment Regarding Requirement for Deposit		's Statement of Reasons for Allowance

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ALUMINUM OR ALUMINUM ALLOY-BASED LITHIUM SECONDARY BATTERY

Examiner: Yuan

S.N. 10/040,433

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April 14, 2004

Detailed Action

- 1. The Applicant's amendment filed on April 12, 2004 was received. Claims 7-9,11-13 were cancelled.
- 2. The text of those sections of Title 35, U.S.C. code not included in this action can be found in the prior Office Action issued on January 27, 2004.

Claim Rejections

3. The claim rejections under 35 U.S.C. 112, first paragraph, on claims 12,13 are withdrawn because they have been canceled. The claim rejections under 35 U.S.C. 102(e) as anticipated by Tomiyama et al. on claims 7-9 and 11 are withdrawn because they have been canceled.

Reasons for Allowance

4. Claims 1-6 are allowed. The invention of independent claim 1 recites a lithium secondary battery comprising at least a positive electrode, a positive electrode connecting member, a negative electrode, a negative electrode connecting member and a non-aqueous electrolyte. The positive electrode connecting member is composed of a clad material comprising (1) one of aluminum and aluminum alloy, and (2) one of austenitic stainless steel and ferrite stainless steel. The closest prior arts of record, Sakamoto et al. and Tomiyama et al., do

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not teach or suggest such combination for use in the positive electrode connecting member. Sakamoto reference only teaches the positive electrode current collector can be an aluminum foil, an aluminum alloy foil, a nickel foil, and the like. Tomiyama reference teaches the positive electrode current collector is made of an aluminum foil containing manganese and magnesium. There would be no motivation to use a clad material for the positive electrode connecting member in a lithium secondary battery because it involves additional manufacturing step(s) and cost.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dah-Wei D. Yuan whose telephone number is (571) 272-1295. The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick J. Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dah-Wei D. Yuan April 14, 2004 Delive /